

Dr. Chuck Ryan:

Good afternoon, good evening everybody, and greetings from the headquarters of the Prostate Cancer Foundation in Santa Monica, California. I'm Chuck Ryan and glad to see you all. We have a very special webinar tonight. We're going to be talking about PSMA PET Imaging: Doctor and Patient Perspectives. And this event tonight is generously supported by Lantheus. So PCF has been involved in the funding and funding research on the discovery of the prostate-specific membrane antigen and its subsequent use in the clinical setting for both diagnostic use and therapeutic planning. The mission of the Prostate Cancer Foundation is to reduce the death and suffering from prostate cancer and to fund transformational research that accelerates progress towards this goal.

We started funding research on PSMA back in 1994, which was the second year of the Prostate Cancer Foundation's existence. The man shown up in the upper right corner of your screens, Dr. Neil Bander is at Weill Cornell is accredited with the discovery and much of the characterization of this important molecule. We've invested no less than \$28 million in research on PSMA biology, molecular imaging, and therapy. And we are now in 2023 and 2022 beginning to see the importance of this molecule in its use and the day-to-day clinic in the initial staging and treatment of men with localized and even metastatic prostate cancer.

For further information on PCF resources and our community for patients and families, I remind you all to go to [pcf.org](http://pcf.org) where you can sign up for updates, download our guides, view past webinars, and register for our upcoming webinar in April, which will cover clinical trials and even join one of our online support group on Facebook, we have several thousand members and you see some of the titles of some of our resources shown below.

It's my pleasure to welcome a friend and colleague, Dr. Phil Koo from the Banner MD Anderson Cancer Center in Arizona. Dr. Koo is Chief of Diagnostic Imaging and a Physician Executive of Oncology. He's a Diplomate of the American Board of Radiology and the American Board of Nuclear Medicine. He has an academic interest in PET imaging and prostate cancer and many years of experience, not only in interpreting these images, but in developing them as national standards. He's known internationally for his education and lecturing on these topics related to imaging and radiopharmaceutical-based therapies in prostate cancer. And he is the Editor of the Imaging Center of Excellence on UroToday. And I encourage you all to visit [urotoday.com](http://urotoday.com) where there is also educational material, much of it is doctor to doctor, but we have some other nice pieces of information and a nice interview with Dr. Bander who discovered PSMA that was filmed a few months ago. Dr. Koo was awarded the 2022 Society of Nuclear Medicine and Molecular Imaging Presidential Distinguished Service Award.

Our two guests tonight are Dr. Ike Credle and Dr. Sharron Credle and Ike Credle is a prostate cancer patient. He's a retired Major in the US Army, served in Operation Desert Storm and Desert Shield, and served as a Professor of Military Science and American Military History of Virginia State. He holds a Doctor in Education in Organizational Leadership and he works as a Senior Training Specialist at Fort Belvoir in Virginia. Dr. Sharron Credle is Founder and CEO of the Sharron Credle Corporation, has extensive experience in organizational leadership training and development.

We're delighted to have both of them with us tonight to talk about this important area. And for the first time on our webinar, we are joined by a patient and a caregiver who can give us their perspective on these advances. I'd like to welcome Ike and Sharron now to the show here. Good to see you. Ike, great to see you and thank you for joining us and sharing your story. Tell us, my understanding is you were diagnosed with prostate cancer and you had the scans as Dr. Koo has been talking about, and you had a bone scan that looked a little scary, and then you asked for a second opinion. Tell us what happened.

Dr. Ira "Ike" Credle:

Absolutely, and thanks again for having us. In the fall of 2021, I received notice from what I referred to my primary care doctor at the VA that my PSA had gone from a three to a five over COVID and she thought it would be a good idea to go to see a urologist and we did that. And so decided that I would wait until after the holidays to have a biopsy. We had a biopsy on January 7th and the biopsy showed that I had cancer. And three of the 12 samples were cancerous, there were actually four, I'm sorry, and one of the four was aggressive.

They also determined from bone scan and CT scan that the cancer had spread and they showed lesions on my left and right rib and the upper rib, also lesions on my pelvic area and one on my back shoulder. And so the diagnosis was that, yes, you have prostate cancer and it had metastasized. And so, certainly having a history of prostate cancer in my family, we knew it may be coming but we weren't expecting the diagnosis of the metastasis. And so with that information at the VA, we decided that maybe we should, because let me just share, they were ready to start treatment right away and they were ready to start hormonal treatment as well as chemo. And they said, "Well, you can go ahead and get started right now and it won't hurt anything." And I said, "Well, let me wait a little while."

And so my wife had an appointment at Walter Reed. I was getting treated at the VA initially. So during that appointment, I said, "Let me go on the third floor and talk to an oncologist and try to get a second opinion." So I was going to use Walter Reed for my second opinion. Well, unbeknownst to me they had a prostate cancer center when I arrived on the third floor and they took my information. First thing the nurse asked, I was explaining to her what had happened, what the diagnosis was and she said, "Well, who told you that the cancer had spread?" And I said, well, I was bringing my records up there so they could see. I said, "Well, this is the evidence right here." And she said, "Well, those spots may just be injuries or something. We don't know yet."

Dr. Chuck Ryan:

And you were a 20-year military veteran and you had done a few things that people do in the military that might affect the bone scan.

Dr. Ira "Ike" Credle:

Absolutely. Jumping out of airplanes and some other things, you're absolutely right. And so, certainly with that diagnosis, we were, I think as was mentioned, it was a very stressful time for us. And fortunately for us, we ran into Dr. Chestnut at Walter Reed and they had a great program in that prostate cancer where they would, on a Monday we would spend all day briefing us and we attended classes and we talked about every aspect of what the cancer was, to the different types of treatments. And really post-operation, but to make a long story short, we elected to get a robotic prostatectomy, but only after Dr. Chestnut recommended a PSMA PET scan.

Dr. Chuck Ryan:

So you started out your journey, you're told you're going to go on chemotherapy and hormone therapy and you had two great assets-

Dr. Ira "Ike" Credle:

Rest of my life.

Dr. Chuck Ryan:

Right. You had two great assets, you had access to Walter Reed and you had a caregiver advocate who is also joining us today. So Sharron, tell us a little bit about your thoughts during this time and your recommendations for those loved ones of the men being diagnosed and how they can help navigate this journey as you so effectively did.

Dr. Sharron Credle:

Right. So thank you all for being here and having this very important conversation. What I have come to understand is that we have to be in a listening mode. I believe that patients should not go to appointments alone. And when they go to their appointments to get the results of any test, especially when we're talking about cancer or something serious, I think you need to have someone with you who can listen and hear and who have a great sense of emotional intelligence.

And so when that diagnosis was presented to us, I just sat there quietly, I took my notes, I didn't say anything, but I knew when we left out of there, I was going to tell Ira, we need to get a second opinion and a third opinion if that's what we need to do because it just didn't make sense to me. And when it doesn't make sense, you need to make it make sense to me. And then it was how it was done that was a little off-putting to me, but I couldn't get wrapped up into that because it was really about Ira and the news that he was hearing and what was going on. And so the fact that Ira is the type of man that always goes to the doctor, so that was very helpful. And so I knew that he was going to do what was required and get some additional information so that we can make an informed decision.

Dr. Chuck Ryan:

Right. So a couple of key points, I'm just going to underline what you said. Everybody should go to the doctor with a partner, with a scribe, with a note keeper and bring a pad of paper is the other thing I would add. And the other thing I would add is more and more patients are recording their time with me and everybody asks, I think everybody, most people ask before they do that. I personally don't have a problem being recorded, but as a courtesy to the doctor, it's probably good for them to know that you're doing it. But it can be very helpful I think after the visit. Now what did he say? Or what was that question? And so that's really, really important data. When you're the patient, you're overwhelmed. And even when you're not overwhelmed, having another set of ears is always good. So, so glad that you were there. It made a huge difference here.

Dr. Sharron Credle:

I concur. And also, you're speaking a lingo that most of us do not understand. And so being able to either write it, record it, and then not being afraid to ask questions. And I think we ask a lot of questions just to make sure that we were connecting all the dots and that it just made sense to us so that when the decision was made in terms of his treatment plan, that we felt good because we had all of the information that we needed and we felt secure that that was going to be the right decision for Ira.

Dr. Chuck Ryan:

Right, right. And I think the other thing you spoke to so nicely is it seems like you kind of had a sense that this didn't fit and Ira, your PSA was low, you had this military history where maybe some injuries had occurred and these things are showing up on the bone scan. So those things kind of added up, but I mean if you have a bone scan that would be multiply positive with multiple spots, typically you're going to see a higher PSA, that kind of thing. But that was this really interesting piece of data here. Dr. Koo, how often is this happening?

Dr. Phillip Koo:

Sadly, I think it's happening more often than we would like. And I think it really just highlights how great this PSMA technology is, that it's really showing us the truth when we didn't even know what the truth was for a long time. So kudos to you for taking the initiative to get that second opinion and really go after the truth.

Dr. Chuck Ryan:

That's right. So Dr. Ike Credle, we'll go back to you now. So then you're told initially, I need hormone therapy, chemotherapy, this is the rest of my life. And then second opinion, PSMA PET scan, I don't need it, I have a radical prostatectomy. And how do things go from there?

Dr. Ira "Ike" Credle:

Well, it went quite well actually. I was told I had lesions on my kidneys as well as the bladder, but once they did the PSMA PET that Dr. Chestnut and his team, they sat down and talked to us and they just explained what they thought would be the best route for us to go. And we were also fortunate to have family members that are physicians that could help us with the lingo. I mean Gleason scores and things of that nature. I mean it was all new to me and certainly that helped us understand and be prepared to ask some good questions once we sat down. But Dr. Chestnut and his team, they made their recommendation, we went with the surgery. We followed everything that he told us to do following the surgery and we're doing quite well now.

Dr. Chuck Ryan:

That's great. So you bring up another really important point, which I want to go back to Phil Koo about, which is the doctors, you're very fortunate to have good doctors, experienced doctors. This PSMA PET scan is a test that requires doctor's interpretation. It's not a completely objective test like a PSA or a blood count or something like that where you can draw a line and say above this and below that. And so Dr. Koo, where are we in this country? Are the doctors now pretty used to evaluating these scans and how much does the interpretation and the interpreter of the scans really matter in these cases?

Dr. Phillip Koo:

I think it's absolutely important, and it is vitally critical to making sure you get the most out of the test as possible. And I think one piece of advice I have for the patients is you should know who the radiologist is or what group or practice you're going to because it's important. They're physicians, they're highly trained individuals and you want to make sure the person reading this is experienced and has a lot of just volume, has read a lot of these, but also is connected to the medical oncologist and urologist so they're getting feedback as well, because the last thing you want is someone to interpret it and never get feedback whether they were right or wrong because we could be wrong, for sure.

The one piece of evidence that we have that shows that the learning curve, there is evidence that shows that the learning curve with this test though is better than what we've had in the past. There was one study that showed that PSMA PET has less number of indecisive interpretations than conventional imaging. So I do think there's a lot of hope here and physicians will get better quickly.

Dr. Chuck Ryan:

So we now live in an era where, by law, patients can get access to all of their medical records. So I welcome that and frequently will chat with my patients who I see them on a Monday and they've spent

Sunday afternoon reading their scan reports. And there are some numbers in there that might be useful. And you talk about how there's not as much variability as one would hope, but there's a number we haven't talked about yet, which is the SUV, which is essentially a brightness score of these lesions. And Dr. Koo, could you tell us just a little bit about that and how that might lead to changes in interpretation?

Dr. Phillip Koo:

Sure. So as you said, SUV stands for standardized uptake value and it is an index of how bright things are. We have a little bit of a joke within our community that SUV stands for silly useless value because it's just one component to how we look at images. And I think one other piece that needs to be looked at is also how the activity in that lesion you're looking at compares to background and how it compares to other standard organs like the liver. So it's really sort of multiple pieces of information we're trying to put together in our minds to come up with that diagnosis. That being said, it is important, SUV and I think it is going to play a role, especially as we select patients to undergo treatment down the road.

Dr. Chuck Ryan:

Excellent. Ike and Sharron, I think you could write a nice little handbook on how to get a second opinion. You felt it, you went through it. Any other guidance you would offer to patients at this point? Not just about the scanning, but those who are out there, we've got about a thousand people listening live and more on the recording, if they're wondering, "I should get a second opinion but I don't want to make my doctor upset. I don't know where to go," what advice do you have? I'm going to go to you, Sharron, and have you pick up where you left off on that.

Dr. Sharron Credle:

I'm so glad you did. It is your life. It's your body. You have to decide what's important to you. You're paying through your insurance to get this information and you deserve the best information that's out there that's going to help you make a decision. And one of the things that struck me when Ira and I first got that diagnosis was, I'm very observant, and so I'm thinking, we're not going to be on an assembly line. We deserve better than this. And so because we have access and we know how blessed we are and how fortunate we are, we're going to use this information. And just because you tell me something doesn't mean that it's so. And so I'm going to do everything within my power to make sure that, if it is so, that I have everything that I need to help us move forward. And so you have a right and you do not have to worry about upsetting anybody about whether or not you get a second, third, fourth opinion. That is your right. Take advantage of it if you have the opportunity.

Dr. Chuck Ryan:

Yeah. Ike, anything to add onto that?

Dr. Ira "Ike" Credle:

Yes, I would like to add, first of all, for some of the folks out there that may be listening, I did have a bone biopsy done at the VA, but those doctors were still concerned about lesions and felt like the cancer still had spread, even though they did a bone biopsy from the pelvic area-

Dr. Chuck Ryan:

And it was negative. Your bone biopsy was negative, Ike?

Dr. Ira "Ike" Credle:

Yes, it was negative. The other thing I would add is that we were fortunate, as Sharron said, to have healthcare, but I would add just to let the patients know, because this is a stressful time, depression can set in, if you're not a person of faith, you may want to consider that, but I would say stay positive. It is critical that you stay positive and that you're comfortable and don't feel embarrassed or feel like you're upsetting the first person that made the diagnosis to seek that second opinion.

Dr. Chuck Ryan:

Excellent. I think those are great pieces of advice for any patient. And it can be daunting, it can be challenging, people look at doctors as the ultimate authority and people don't like to challenge ultimate authorities in many cases, but we're wrong sometimes. We're human beings and we're learning a new technology. And I think that that's the other piece that I wanted to get across here. So, really, really important pieces of information and data.

And Ike, we're so glad that you're doing well and that this test was able to make a difference for you. We know that it's making a difference for many men around the country and around the world. And hopefully your sharing your story with us tonight is going to help other men get the help that they need. And I thank both of you for joining us for that.

I thought what we might do in the last few minutes is the three of you can help me with the questions that we're getting from the crowd because we've got a lot of them, and I think they are in many cases similar to the story that you've gone through. So first of all, what about people without prostate cancer who have enlarged prostates, Dr. Koo? Is PSMA PET for them?

Dr. Phillip Koo:

Currently not indicated, perhaps down the road, but not right now.

Dr. Chuck Ryan:

Okay. And I'll ask you again, I think I asked you this before and I'm not sure I got the answer. What is the lowest possible PSA test that one's going to see a positive PSMA PET scan?

Dr. Phillip Koo:

I've seen a positive PSMA PET with a PSA level of 0.1. So, it happens. Is it common? No. The higher the PSA level is, the more likelihood we're going to see something positive. I've seen 0.2 thrown out there as a cutoff, and that's actually reasonable as well.

Dr. Chuck Ryan:

Okay. And then Ike, have you had a PSMA PET scan since you've had your surgery?

Dr. Ira "Ike" Credle:

No, I haven't. Not the PSMA.

Dr. Chuck Ryan:

Not since the surgery.

Dr. Ira "Ike" Credle:

No.

Dr. Chuck Ryan:

So not being used in follow up for you and Phil, what is the role of using PSMA PET scan as a routine follow-up test?

Dr. Phillip Koo:

I think routine follow up, probably not, but as the PSA goes up and it recurs and you're concerned about where the disease is? Yes, I think we should start considering getting another one.

Dr. Chuck Ryan:

All right. Very good. So that was a question that's been asked. So what about somebody who's other end of the spectrum, they have the PSMA PET, it shows a fair amount of disease. They go on the hormone therapy or the chemotherapy, like Ike was recommended to receive. Do you use the PSMA PET to evaluate response? What happens to those spots after you go on hormone therapy?

Dr. Phillip Koo:

That's a great question. I think today it's not indicated for that type of utilization. There is a lot of research and there's criteria now being developed that shows a way that it could be used like that in the future. But this is where I think insurance will push back, and rightfully so. I'm hoping though in the next two, three, four years, that will be another indication for PSMA PET.

Dr. Chuck Ryan:

Okay. Another question. It's the opposite of the question I asked a minute ago, which is you said you've seen a positive PSMA PET at 0.01. What's the highest PSA you've seen with a negative PSMA PET?

Dr. Phillip Koo:

I would say maybe two. Maybe two. The data shows us, as the PSA goes up, I think over four or five, it's almost 100% detection rate. So there are though a small subset of patients that do not express the PSMA protein, especially upfront, it's small, but it happens. And I think that information is important as well because if the physician, the oncologist knows you have disease and it might be aggressive and the PSMA is negative, I think it's a trigger that you might have something more aggressive that needs to be followed much more closely.

Dr. Chuck Ryan:

Right. And we haven't really addressed the issue of the use of PSMA PETs in the metastatic castration resistance setting tonight, and we will do that in a subsequent educational event, I'm sure. But you're getting, I think, at the issue of patients with more aggressive disease with a high burden of metastatic disease perhaps, or those who've had multiple treatments where about 15% or so don't express PSMA, their cancer just doesn't have that protein on it and so it's not going to be useful in that setting. And so that's a really key important point.

I also have had a couple of cases in my practice where I've had somebody showed up with what looked like a liver metastasis six months after having a negative scan. And I thought, well, taking a piece out of the Sharron Credle thought book, which is this doesn't fit, and so I myself said, "I'm going to do something else." And so I did an MRI scan for the patient, the MRI did not show anything in the liver.

And so we had a false positive and we haven't really talked too much about that, but false positives in areas like the liver or the lung are things that you do see. And what should a patient, if there's a suspicion for a false positive on the part of the doctor or the patient, what are the other tests that we can do afterwards?

Dr. Phillip Koo:

Sure, the false positives do occur, but they're less often with PSMA. I think when you get that sense that something's not right, you could always do an MRI, depending on where it's located, you could further evaluate it with additional imaging so you could characterize it better. And then there's always the option of getting a biopsy if it can be obtained, if tissue can be obtained, get a biopsy and try to find out exactly what it is.

Dr. Chuck Ryan:

Yeah. The other thing is we really can't tell the size of tumors from the PSMA PET, right? These are more kind of like a halo around it?

Dr. Phillip Koo:

You can actually. You can look at the CT because it should line up and then if you can see it on CT, you could provide relatively good measurements on exactly the size and the location.

Dr. Chuck Ryan:

But there's a CT scan and a PET scan on top of it, and so you layer them on, which is how you can determine the size. But the PET doesn't really tell, the PET itself doesn't really tell us about the size. Great.

Questions about neuroendocrine prostate cancer? I think we already addressed that. That's most likely the 15% or so that does not have the PSMA, you would agree with that?

Dr. Phillip Koo:

Yes.

Dr. Chuck Ryan:

Final couple of minutes here. So radiation from the PSMA PET, we talked about this in the beginning. You said basically pretty safe, but is there a limit? Can you only receive a few of them in your lifetime? Any concerns that need, we always worry about other cancers arising from radiation. What are your thoughts on that?

Dr. Phillip Koo:

I think it's always, we live by a principle as called ALARA, A-L-A-R-A, as low as reasonably, or let's Google that. ALARA, as low as reasonably achievable. So that's where we just need to be thoughtful about how we expose patients to radiation. I think if we use it in the ways that we talked about tonight, the benefits will outweigh those risks and the risks for the patient actually developing some sort of secondary malignancy due to radiation exposure is very minimal.

Dr. Chuck Ryan:



Great. Couple of other questions in the last couple minutes. Should we use PSMA PET scan in patients who are on active surveillance?

Dr. Phillip Koo:

No. We recently published a paper on this and there's no good data that justifies why you would do that.

Dr. Chuck Ryan:

Okay. Who should get a PSMA plus an FDG PET?

Dr. Phillip Koo:

Right now, I would say nobody, but I know it's controversial, but those patients who are neuroendocrine differentiated and you're thinking about different therapies like a Lutetium-based therapy or whatnot, it can come into the equation and the discussion. It's much more advanced. I think that's where a discussion that we'd have with someone like you as a medical oncologist would be very helpful, but tricky situation. Phase two data that shows that maybe it helps, but we still need to learn more.

Dr. Chuck Ryan:

Sure. Okay. Very good. Well, as we wrap up here, let's go back to our two guests and have them close out for us. Final thoughts on this issue of PSMA PET and novel imaging, but I actually think final thoughts on being a patient and being thrown into the midst of new technology as it comes out? Sharron, you're nodding. I'll go to you first.

Dr. Sharron Credle:

Well, actually you know what I was thinking? I was thinking this conversation is complicated because what we've learned is that prostate cancer can be a slow progressing cancer. And I was thinking, what advice and at what point do you all determine when treatment or surgery is required? And we know that our Black men are so susceptible to prostate cancer. So I wasn't even thinking about it from a prostate or from the PSMA perspective, I was thinking, how do you make that decision in terms of when treatment is required?

Dr. Chuck Ryan:

Treatment after surgery or initial-

Dr. Sharron Credle:

No, initial treatment, because we know, from what I understand, it's a slow progressing cancer.

Dr. Chuck Ryan:

Sure. Well, I'll ask Dr. Koo in a second, but my take on that is it's sometimes a slow moving cancer, sometimes it's not. And what can happen is we need to risk stratify patients. We want to know how quickly things are changing. Is the PSA going up rapidly? Are there symptoms? And so all of that kind of feeds into our clinical judgment so that we can risk assess a patient. And yes, Black men are more likely to develop cancer at an earlier age. And so we need to take all those things into consideration as we use this test. This is just one test of many, and a test is only part of the clinical judgment that the doctor uses. And so it's really important that you've given us that context, which is to say, the test doesn't

determine how we're going to treat the patient, the patient and the totality of the data do. Dr. Koo, last thoughts?

Dr. Phillip Koo:

I agree, and the goal is to die with prostate cancer, not of prostate cancer. And if we could manage your quality of life and improve that and maintain that throughout that journey, then I think that's a victory.

Dr. Chuck Ryan:

And so let's close with our patient. Ike?

Dr. Ira "Ike" Credle:

Yes. Let me first thank you both or thank you all for this informative session. Let me first say that having cancer or cancer in general is a team sport. And I say that because you have to form a partnership with your doctors, with your family members, and all the folks involved. Again, my faith is strong, so you have to be positive.

But let me share this with some of the folks that may be listening. Since my surgery, my PSA has gone from a 0.05 to a 0.089. I have an appointment at the VA next Monday with the radiation oncologist. They want to, of course the VA, they want to stay on top of it, it's just a consult, but because of this type of session, I am armed with information where I can make some good decisions for myself, but I will also share what the conversation will be on Monday with my surgeon, Dr. Chestnut at Walter Reed. But now I'm thinking, based on Dr. Koo's recommendation, that before I receive any type of radiation, we may want to go back to that PSMA PET scan.

Dr. Sharron Credle:

Exactly.

Dr. Chuck Ryan:

Certainly worth discussing.

Dr. Ira "Ike" Credle:

So thanks for being a great team.

Dr. Chuck Ryan:

Yeah, thank you for joining us. Really helped add a lot of information and helps us address this very complicated issue from a very human, personal perspective. So, thank you both for joining us, Doctors. And Dr. Koo, thank you for joining us. It's been a pleasure and we look forward to seeing you next time. I think next month our topic is going to be clinical trial enrollment, the dos and the don'ts and what you should know. So, I'll see you all then. And in the meantime, go to [pcf.org](http://pcf.org) and [urotoday.com](http://urotoday.com) for all the latest information. And thank you again to Lantheus for sponsoring us tonight. Bye-bye.